

AMENDMENT OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of the claims in the application.

Listing of the Claims

1. (Currently Amended) A method of controlling a supply platter motor in a no-rewind film transport system, comprising:

receiving take-up platter control signal information from a take-up platter controller;

processing the take-up platter control signal information based at least in part on a transfer function to produce processed take-up platter control signal information, wherein the transfer function is a ratio of angular speed of a take-up platter and required angular speed of a supply platter; and

controlling the supply platter motor based at least in part on the processed take-up platter control signal information.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The method of claim 21, wherein the transfer function comprises a correction factor.

5. (Currently Amended) A method of claim 21, wherein the processing occurs as a function of time.

6. (Currently Amended) A method of claim 21, wherein when a supply film roll on the supply platter has an inner radius approximately equal to an outer radius of a take-up film roll on a take-up platter, the transfer function is substantially constant.

7. (Original) The method of claim 1, further comprising receiving supply platter motor speed or positional signal information and take-up platter motor speed or positional signal information and processing the supply platter motor speed or positional signal information and take-up platter motor speed or positional signal information, wherein the supply platter motor is controlled based at least in part on the processed supply platter motor speed or positional signal information and the processed take-up platter motor speed or positional signal information.

8. (Original) The method of claim 6, wherein the take-up platter control signal information, the supply platter motor speed or positional signal information and take-up platter motor speed or positional signal information are processed by a transfer function.

9. (Original) A method of claim 1, further comprising increasing stability of supply platter motion based at least in part on the processed take-up platter control signal information.

10. (Original) A method of improving supply platter motion in a no-rewind film transport system, comprising:

determining a time taken for a lead-in film position on a supply platter to transition predefined limits of supply platter acceleration or deceleration based at least in part on supply platter film lead-in position feedback;

determining a speed error between a supply platter reference speed signal and a supply platter speed control signal at the time of the transition;

determining a corrected supply platter speed control signal based at least in part on the speed error signal and the supply platter reference speed signal; and

controlling the supply platter based at least in part on the corrected supply platter speed control signal.

11. (Currently Amended) A no-rewind film transport system, comprising:

a take-up platter controlled by a take-up platter motor;

a take-up platter controller capable of controlling the take-up platter motor through take-up platter control signals;

a processor capable of receiving and processing the take-up platter control signals based at least in part on a transfer function to produce processed take-up platter control signal information;

a supply platter controlled by a supply platter motor;

a supply platter controller capable of receiving the processed take-up platter control signals information and controlling the supply platter motor at least in part with the processed take-up platter control signals information,

wherein the transfer function is a ratio of angular speed of the take-up platter and required angular speed of the supply platter.

12. (Original) The system of claim 11, wherein the supply platter controller comprises the processor.

13. (Cancelled)

14. (Cancelled)

15. (Currently Amended) The system of claim 1311, wherein the transfer function comprises a correction factor.

16. (Original) The system of claim 11, further comprising:

at least one supply platter motor speed or positional sensor producing supply platter motor speed or positional signals; and

at least one take-up platter motor speed or positional sensor producing take-up platter motor speed or positional signal information,

wherein the processor is capable of receiving and processing the supply platter motor speed or positional signal information and the take-up platter motor speed or positional signal information.

17. (Original) The system of claim 16, wherein the supply platter motor is controlled by the supply platter controller based at least in part on the processed supply platter motor speed or positional signal information and the processed take-up platter motor speed or positional signal information.

18. (Currently Amended) The system of claim 17, wherein the processor processes the take-up platter control signal information, the supply platter motor speed or positional signal information and take-up platter motor speed or positional signal information with at the transfer function.

19. (Original) A system according to claim 12, wherein when a supply film roll on the supply platter has an inner radius approximately equal to an outer radius of a take-up film roll on the take-up platter, the transfer function is substantially constant.

20. (Original) The system of claim 11, wherein stability of supply platter motion is increased based at least in part of the processed take-up platter control signals.

21. (Currently Amended) The method of claim 1, further comprising:

 determining a time taken for a lead-in film position on ~~at the~~ supply platter, ~~associated with the supply platter motor~~, to transition predefined limits of supply platter acceleration or deceleration based at least in part on supply platter film lead-in position feedback;

 determining a speed error between a supply platter reference speed signal and a supply platter speed control signal at the time of the transition;

 determining a corrected supply platter speed control signal based at least in part on the speed error signal and the supply platter reference speed signal; and

 controlling the supply platter based at least in part on the corrected supply platter speed control signal.

22. (Currently Amended) The system of claim ~~13~~11, wherein the transfer function is a function of time.

23. (Previously Presented) The system of claim 22, wherein a supply film roll on the supply platter has an inner radius approximately equal to an outer radius of a take-up film roll on the take-up platter, the transfer function is substantially constant.

24. (Currently Amended) The system of claim 11, wherein the stability of supply platter motion is increased based at least in part on the processed take-up platter control signals.

25. (Currently Amended) A method of upgrading performance of a no-rewind film transport system, comprising:

adapting the system so that take-up platter control signal information is processed based at least in part on a transfer function to produce processed take-up platter control signal information, wherein the transfer function is a ratio of angular speed of a take-up platter and required angular speed of a supply platter; and

a supply platter motor is controlled at least in part based on the processed take-up platter control signal information.